Fisher
all metal
SKYLIGHTS

20b
Fi

1959 Sweet's Catalog Files
Industrial Construction 14a/Fi
Architectural 20b/Fi

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Fisher Skylights, Inc.

FISHER SKYLIGHT FEATURES

1. **all metal, puttyless**—Fisher Skylights are constructed entirely of metal and glass. No putty, felt strips, glazing cushions, gaskets or materials of a deteriorating nature are used.

2. **metals used**—Fisher Skylights are constructed of any load carrying metal such as extruded aluminum, sheet aluminum, painted galvanized steel, copper, lead coated copper, monel metal, stainless steel or lead clad steel.

3. **adaptability**—Fisher Skylights range of materials permits the selection of a metal that will provide the solution to any problem involving the presence of fumes from acids, alkalies or corrosive chemicals on the interior and exterior of the building.

4. **strength**—Fisher Skylights provide a strong rigid bar that resists deflection and eliminates any tendency to gyrate under load. Gauges of metal are calculated to meet the load requirements of each installation.

5. **no added supports**—Fisher Skylights are self-supporting within the maximum spans indicated.

6. **glazing**—Fisher Skylights are manufactured in standard single glazed types or with double glazing to meet air conditioning, temperature or excess humidity control requirements.

7. **cantilevered glass rests**—Fisher Skylights knife edge method of glazing eliminates all glass breakage due to vibration, pressure, expansion, contraction or thermal shock.

8. **glass**—Fisher Skylights can be glazed with any of the flat, ribbed or hammered glasses of the wired or non-wired types. Heat absorbent glass can be used without breakage.

9. **double condensation gutter**—Fisher Skylights provide for the full elimination of condensation by gutters within the glass rests, the condensation gutters at the bottom of each bar and from within the interior of the bar by the tension member. Double rows of weep holes lead all moisture to the exterior of the skylights.

10. **shingle lapped glazing**—Fisher Skylight lapped glass construction eliminates excessive length of individual lights of glass in long span skylights. Shingle lapped glazing with metal cross bar provides glass support and weather tight installation without the use of glazing compounds.

11. **assembly**—Fisher Skylights do not require special tools for installation or for removal of glass for cleaning. No soldering is required as all parts are bolted or screwed together. Detail drawings and printed instructions clarify each successive step.

12. **ventilation**—Fisher Skylights can be provided with gravity or power ridge ventilators; power ventilators, or blowers or adjustable louvers in high curbs, operative turret sash, continuous ridge ventilators or by top hinged ventilating skylight design. Details on following pages.

13. **curbs**—Fisher Skylights are adaptable to any type of curb construction. Concrete curbs usually have a wood sill plate installed by others. Details of curbs on following pages.

14. **service**—Fisher Skylights are fully detailed for approval before manufacture. Design drawings, suggested methods, architectural service and preliminary estimate can be promptly provided.

FISHER SKYLIGHT SPECIFICATIONS

Skylights shall be as manufactured by "Fisher Skylights, Inc." of Brooklyn, N. Y., of type shown on the plans.

All metal parts shall be of (extruded aluminum, sheet aluminum, painted galvanized steel, copper, lead coated copper, monel metal, stainless steel or lead clad steel.) of gauges as tabulated in manufacturers manual, so as to insure a total supporting capacity of 40 pounds live load per square foot of skylight.

Bolts to be of ¼" diameter of (Bronze, Aluminum, Stainless Steel) fitted with nuts of same material.

Lead washers and metal washers shall be installed directly under all nuts securing bar and ridge caps.

Eave members shall be provided with two rows of weep holes. One row located in projecting glass-support and one row at condensation gutter at each side of every bar.

Skylights shall be anchored to curb by means of anchor straps of metal similar to that of the main skylight construction.

Ventilator Heads, of corresponding size and material are to be Fisher Ventilators or equal as selected by architect (state make).

Where ventilators occur, the skylight frame shall be equipped with bases of (sheet aluminum, painted galvanized steel, copper, lead coated copper, monel metal, stainless steel or lead clad steel) of gauge as recommended by manufacturer, and of (size) inch diameter.

In general, skylights are to be glazed with (state type, thickness and manufacture desired) glass installed without putty or cushions.

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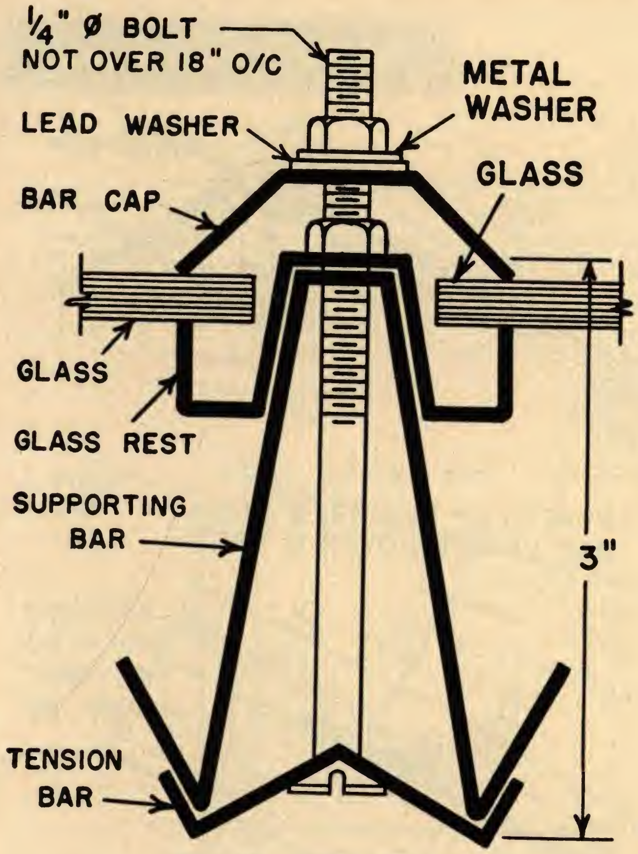
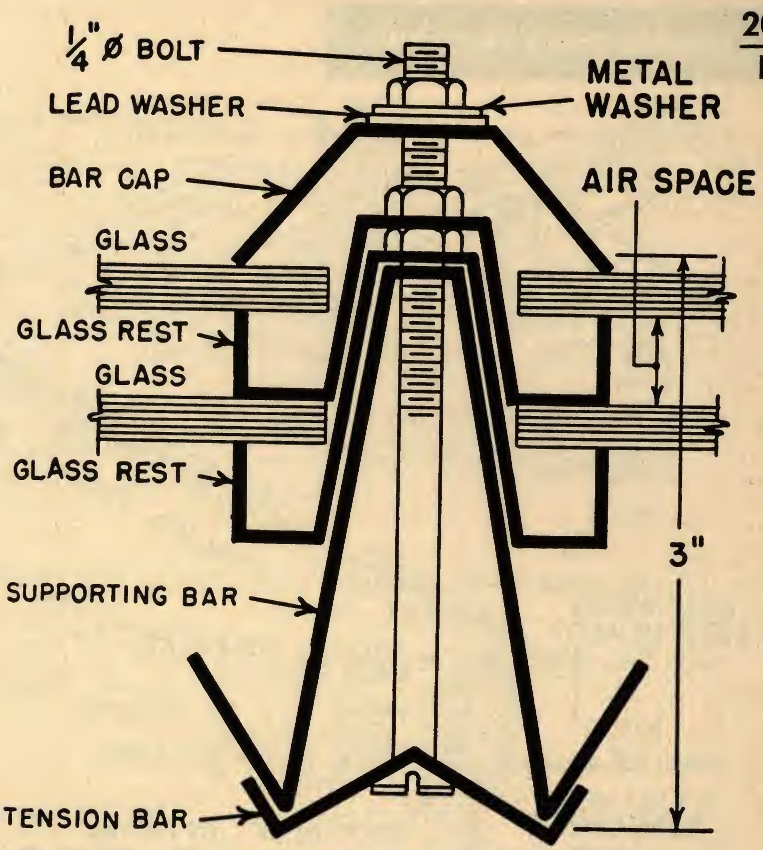


BAR SECTION



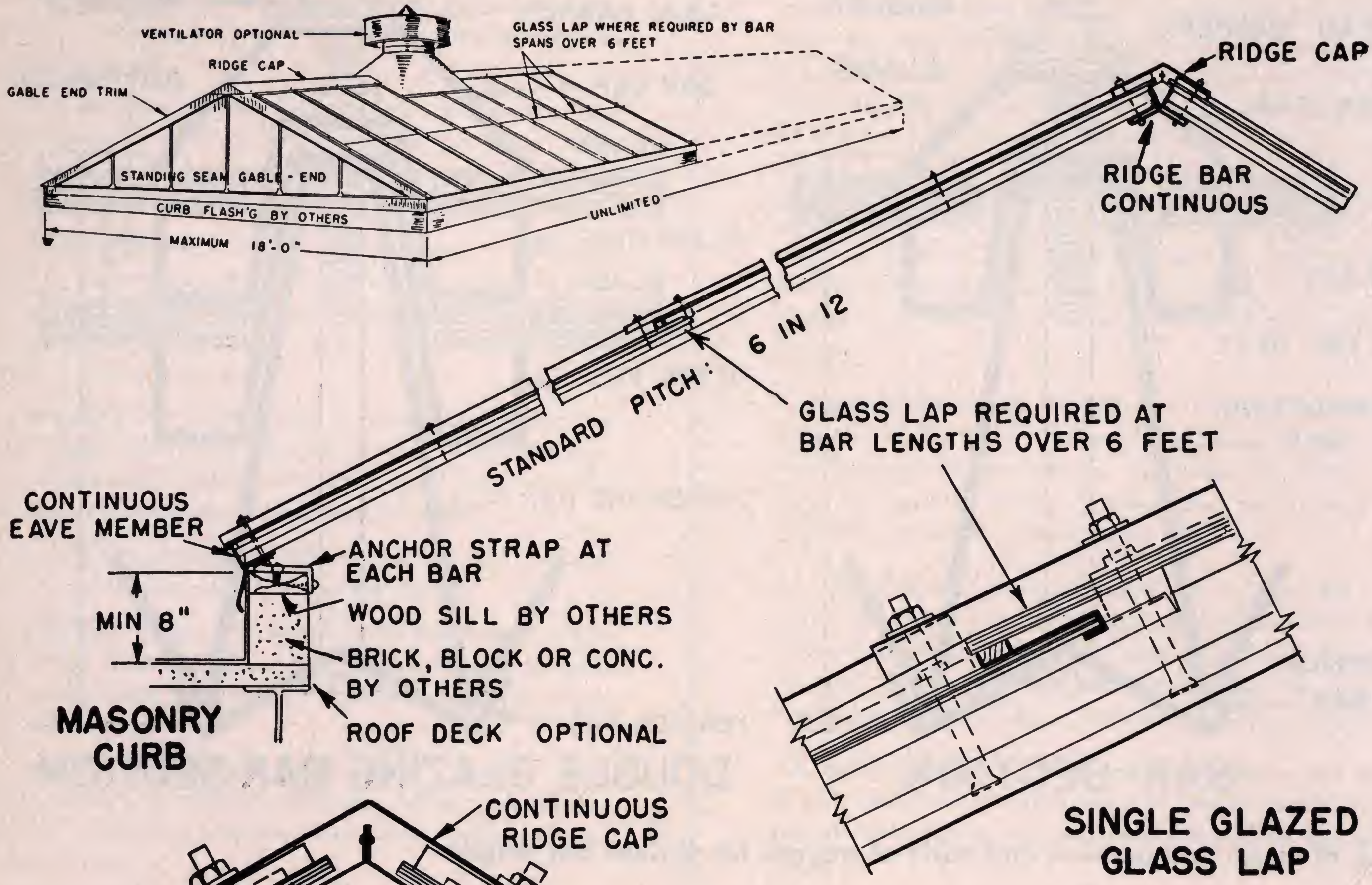
DOUBLE GLAZING BAR SECTION

type of metal designations and table of gauges for various bar lengths

type of metal		fasteners	bar lengths	eave bar	ridge bar	bar caps ridge caps	supporting bars tension bars	glass rest
a	copper	bronze	up to 8′-0″ 8′-1″ to 10′-0″ over 10′-0″	20 oz. 20 oz. 20 oz.	20 oz. 24 oz. 24 oz.	20 oz. 20 oz. 20 oz.	24 oz. 28 oz. 32 oz.	20 oz. 20 oz. 20 oz.
b	copper exterior galv. steel interior	bronze	up to 8′-0″ 8′-1″ to 10′-0″ over 10′-0″	20 oz. 20 oz. 20 oz.	24 ga. 24 ga. 22 ga.	20 oz. 20 oz. 20 oz.	24 ga. 22 ga. 20 ga.	24 ga. 24 ga. 24 ga.
c	galvanized steel	bronze	up to 8′-0″ 8′-1″ to 10′-0″ over 10′-0″	24 ga. 24 ga. 24 ga.	24 ga. 24 ga. 22 ga.	24 ga. 24 ga. 24 ga.	24 ga. 22 ga. 20 ga.	24 ga. 24 ga. 24 ga.
d	sheet aluminum	stainless steel or aluminum	up to 8′-0″ 8′-1″ to 10′-0″ over 10′-0″	.040 .040 .040	.040 .040 .051	.040 .040 .040	.040 .051 .096	.040 .040 .040
e	extruded aluminum	stainless steel or aluminum	up to 8′-0″ 8′-1″ to 10′-0″ over 10′-0″	.040 .040 .040	.040 .040 .057	.040 .040 .040	.057 .057 .096	.040 .040 .040
f	stainless steel	stainless steel	up to 8′-0″ 8′-1″ to 10′-0″ over 10′-0″	.025 .025 .025	.025 .031 .031	.025 .025 .025	.025 .031 .037	.025 .025 .025
g	monel metal	monel metal	up to 8′-0″ 8′-1″ to 10′-0″ over 10′-0″	.025 .025 .025	.025 .031 .031	.025 .025 .025	.025 .031 .037	.025 .025 .025

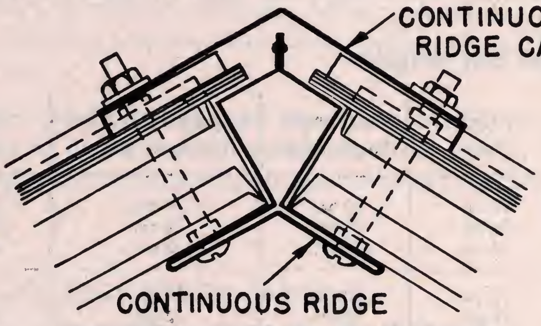
bars are spaced up to 24″ O/C based on span and local code load requirements

double pitch skylight

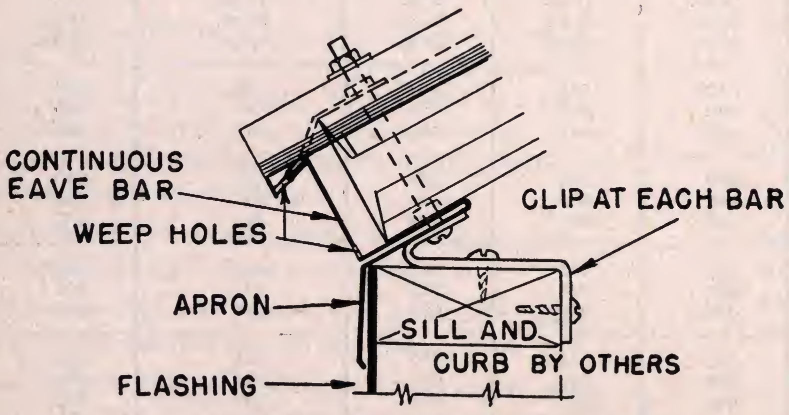


MASONRY CURB

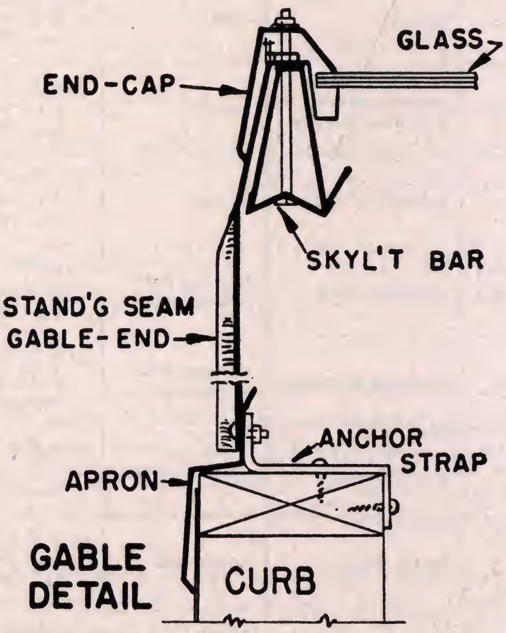
SINGLE GLAZED GLASS LAP



RIDGE—DOUBLE PITCH



WOOD OR MASONRY CURB



GABLE DETAIL

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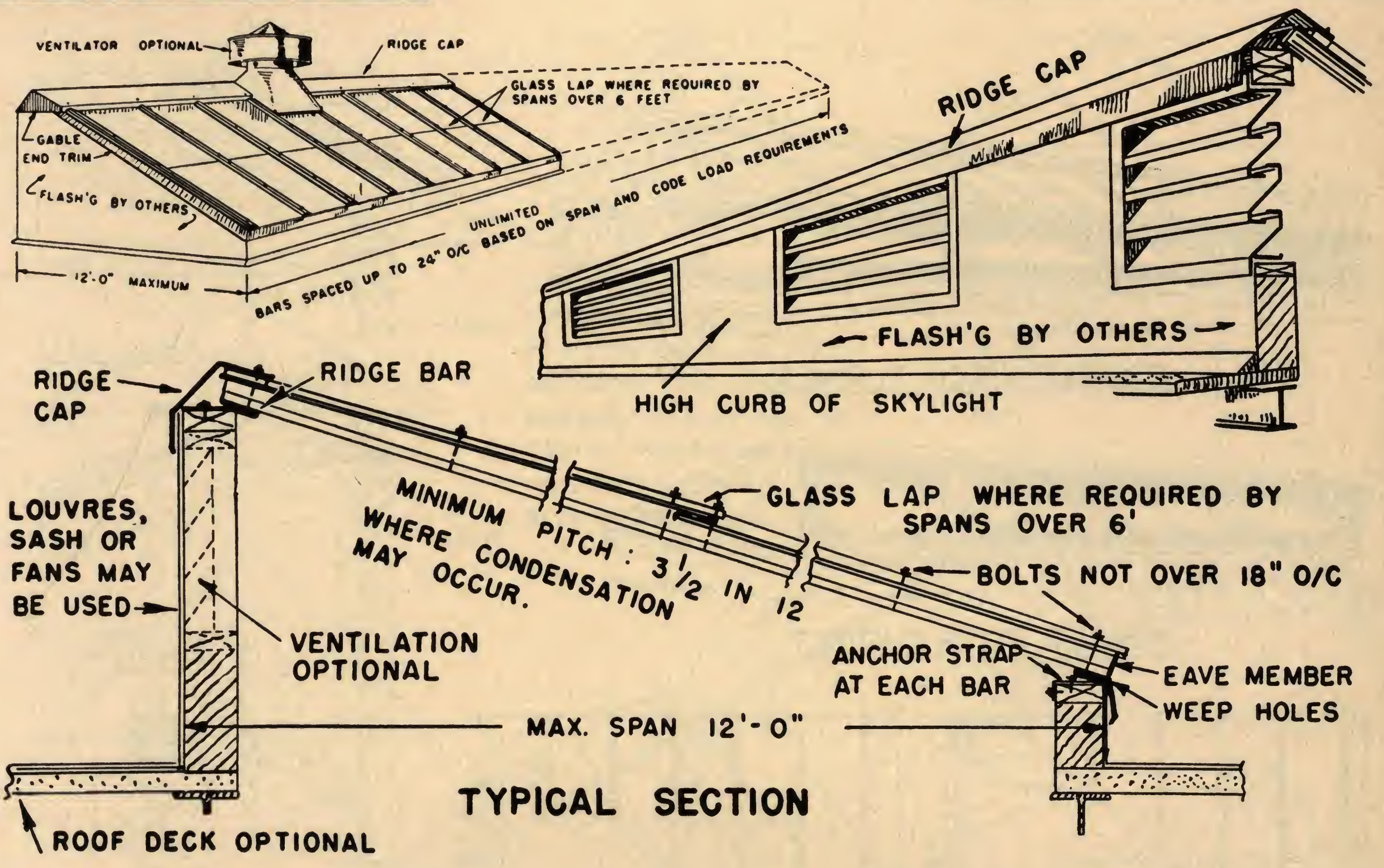
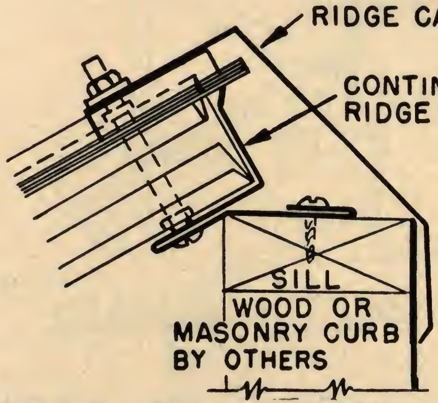
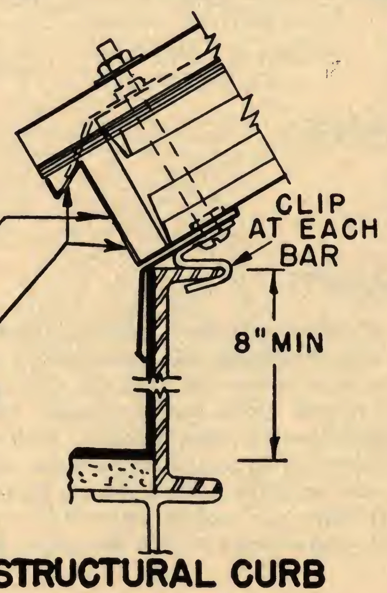
single pitch skylight



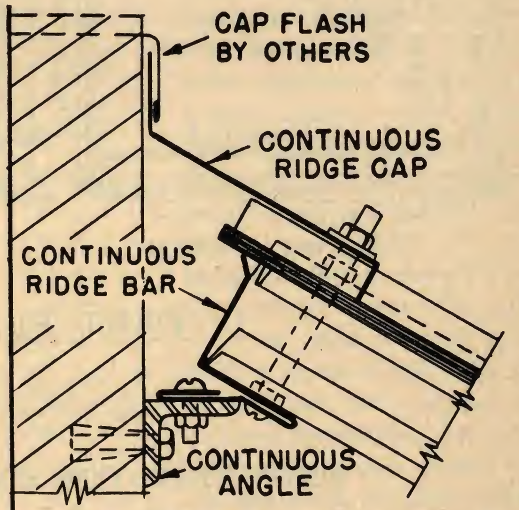
TYPICAL SECTION



RIDGE—SINGLE PITCH

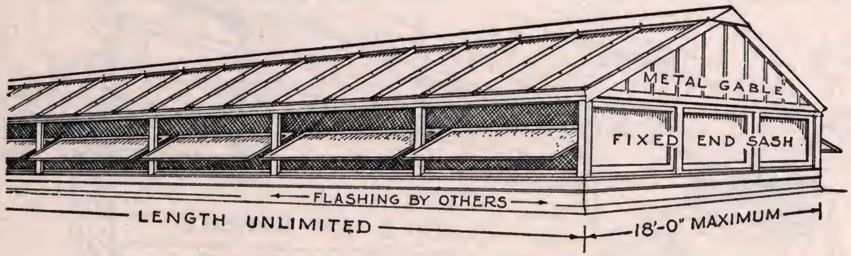


STRUCTURAL CURB

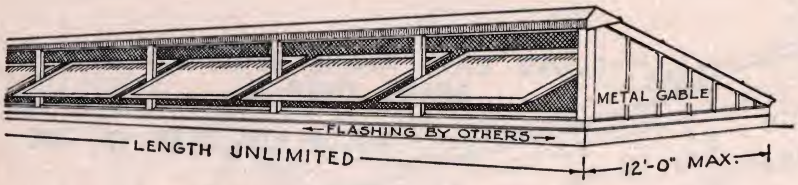


RIDGE AT BUILDING WALL

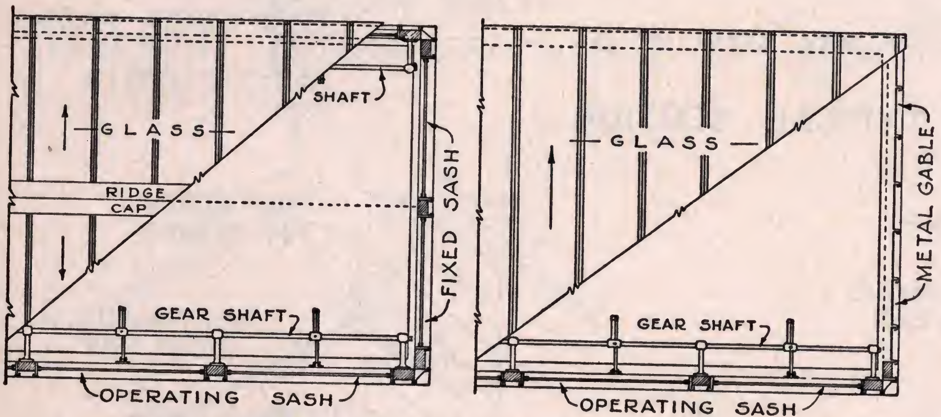
turret type skylight



·DOUBLE PITCH TURRET·



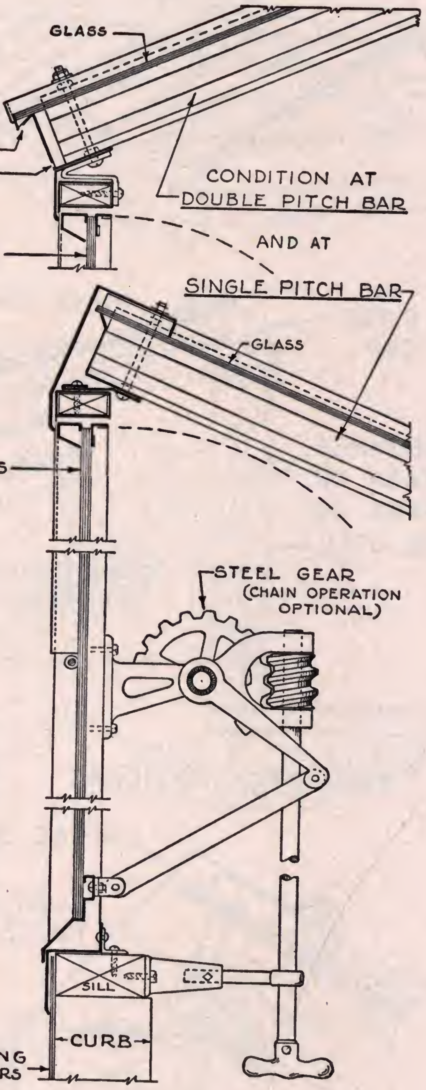
·SINGLE PITCH TURRET·



DOUBLE PITCH TURRET

SINGLE PITCH TURRET

·PART PLANS·

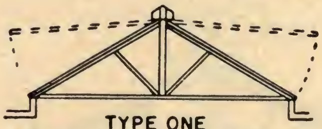


·SECT'N. THRU' SASH·

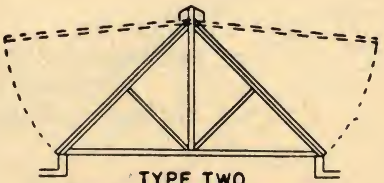
FISHER TURRET TYPE SKYLIGHTS

Turret skylights are constructed of copper, aluminum, painted galvanized steel, stainless steel and monel. They are equipped with ventilating sash operated by pole, crank or chain type gearing. Both single and double pitch turrets can have the sash runs operate in groups up to 40 feet, or in smaller panels spaced along skylight length. The movable sash on each side of double pitch turret skylights operate independently. Sash may be center pivoted or top hung and should be two or three bar spaces wide between mullions. Height can vary from 12" to 36". Skylight top may be single glazed, double glazed or have metal covered asbestos panels in place of glass. Bars are spaced up to 24" on center, based on span and code load requirements. For various types of curb see pages 4 and 5. For wire guards, if required, see page 14.

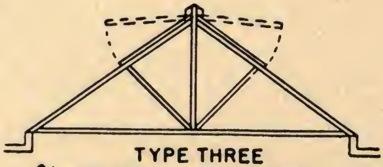
top hinged types



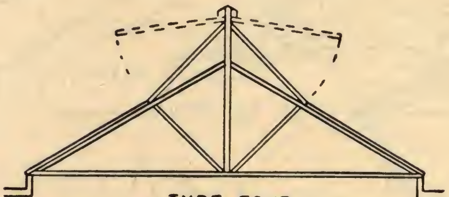
TYPE ONE
7/12 SLOPE FULL VENTED
WIDTHS 4' TO 12'



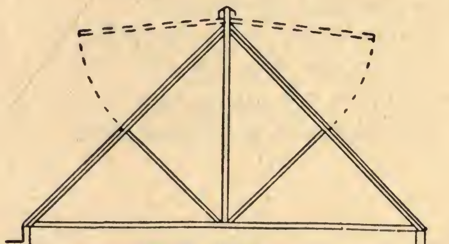
TYPE TWO
12/12 SLOPE FULL VENTED
WIDTHS 4' TO 10'



TYPE THREE
9/12 SLOPE HALF VENTED
WIDTHS 6' TO 18'

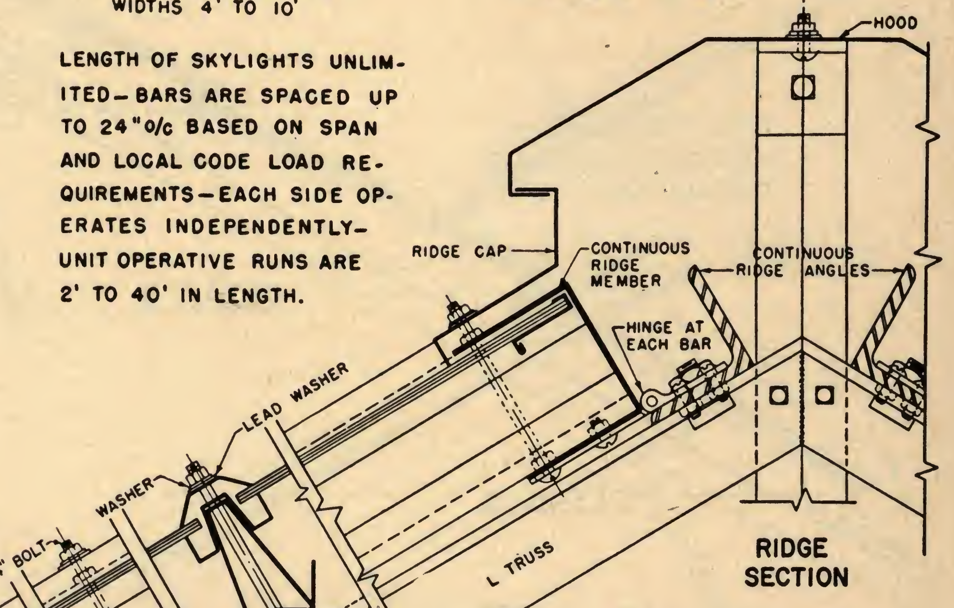


TYPE FOUR
7/12 AND 12/12 SLOPE HALF VENTED
WIDTHS 8' TO 20'

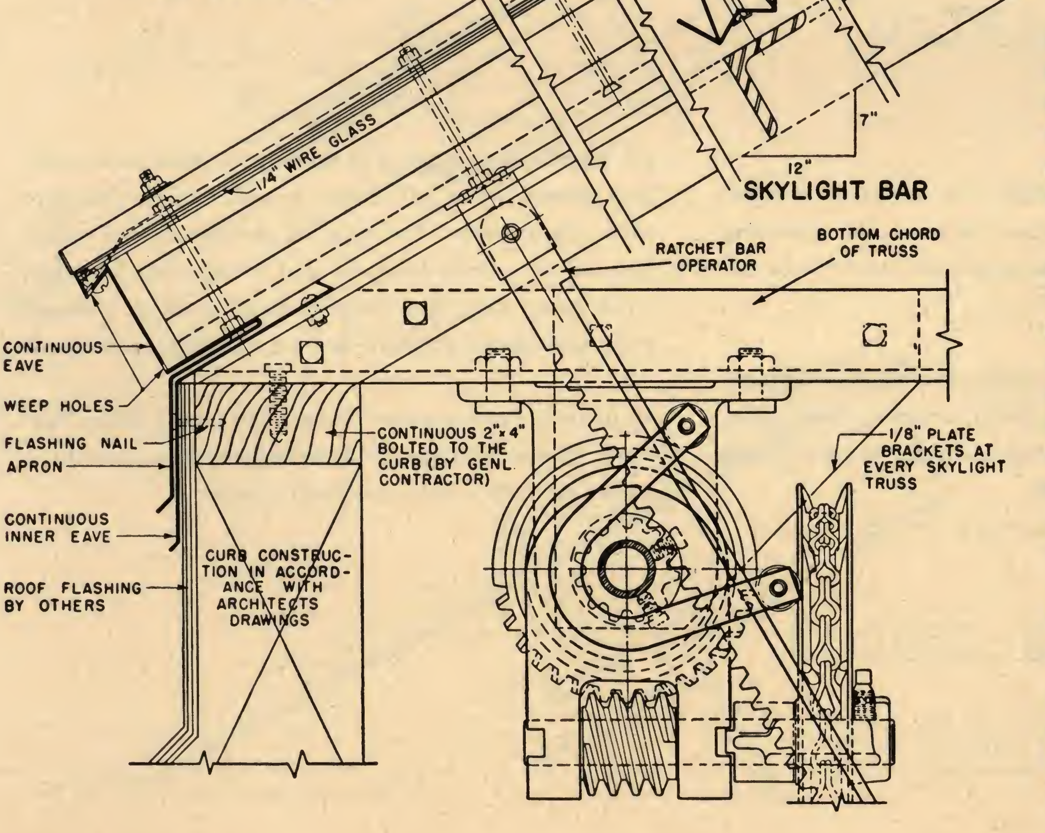


TYPE FIVE
12/12 SLOPE HALF VENTED
WIDTHS 8' TO 20'

LENGTH OF SKYLIGHTS UNLIMITED—BARS ARE SPACED UP TO 24" o/c BASED ON SPAN AND LOCAL CODE LOAD REQUIREMENTS—EACH SIDE OPERATES INDEPENDENTLY—UNIT OPERATIVE RUNS ARE 2' TO 40' IN LENGTH.



RIDGE SECTION



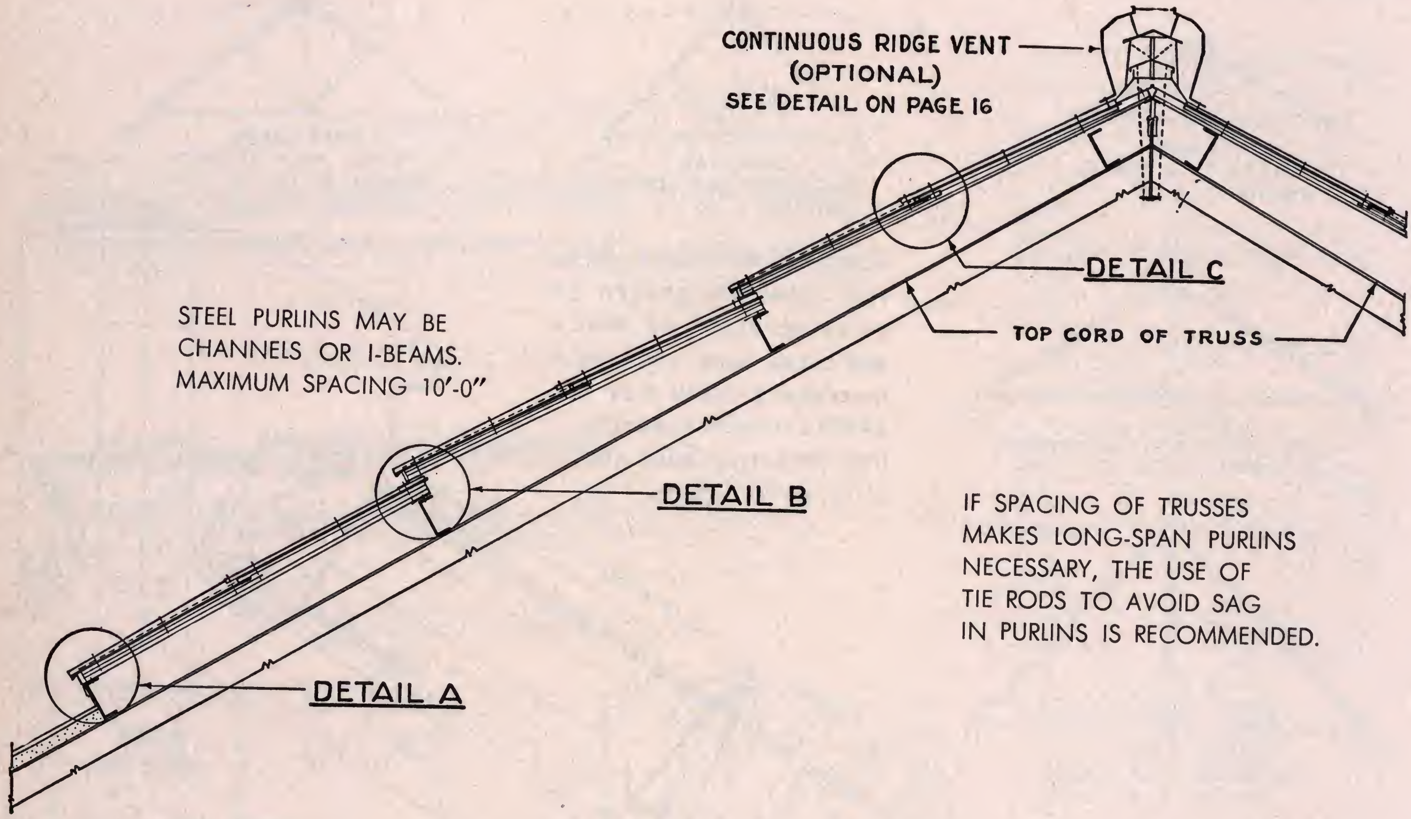
1/4" WIRE GLASS
7"
12"
RATCHET BAR OPERATOR
BOTTOM CHORD OF TRUSS
CONTINUOUS EAVE
WEEP HOLES
FLASHING NAIL
APRON
CONTINUOUS INNER EAVE
ROOF FLASHING BY OTHERS
CONTINUOUS 2"×4" BOLTED TO THE CURB (BY GENL. CONTRACTOR)
CURB CONSTRUCTION IN ACCORDANCE WITH ARCHITECTS DRAWINGS
1/8" PLATE BRACKETS AT EVERY SKYLIGHT TRUSS

SKYLIGHT BAR

Top hinged type ventilating skylights are constructed of galvanized steel, extruded aluminum, sheet aluminum, copper, lead coated copper, monel metal, stainless steel or lead clad steel —Any flat or ribbed wire glass can be used for glazing. Top hinged type skylights are supported on properly designed and spaced steel trusses—The curbs may be of wood, concrete, brick, block or structural steel. The top hinged sash are operated by rack and pinion arms, continuous shafting, worm gear powers and rod and crank or chain controls —motor power operation, remote electrical or remote hand control can be provided.

Top hinged skylights can be provided in explosion venting types for plants handling explosives or volatile chemicals.

panel-lap skylight

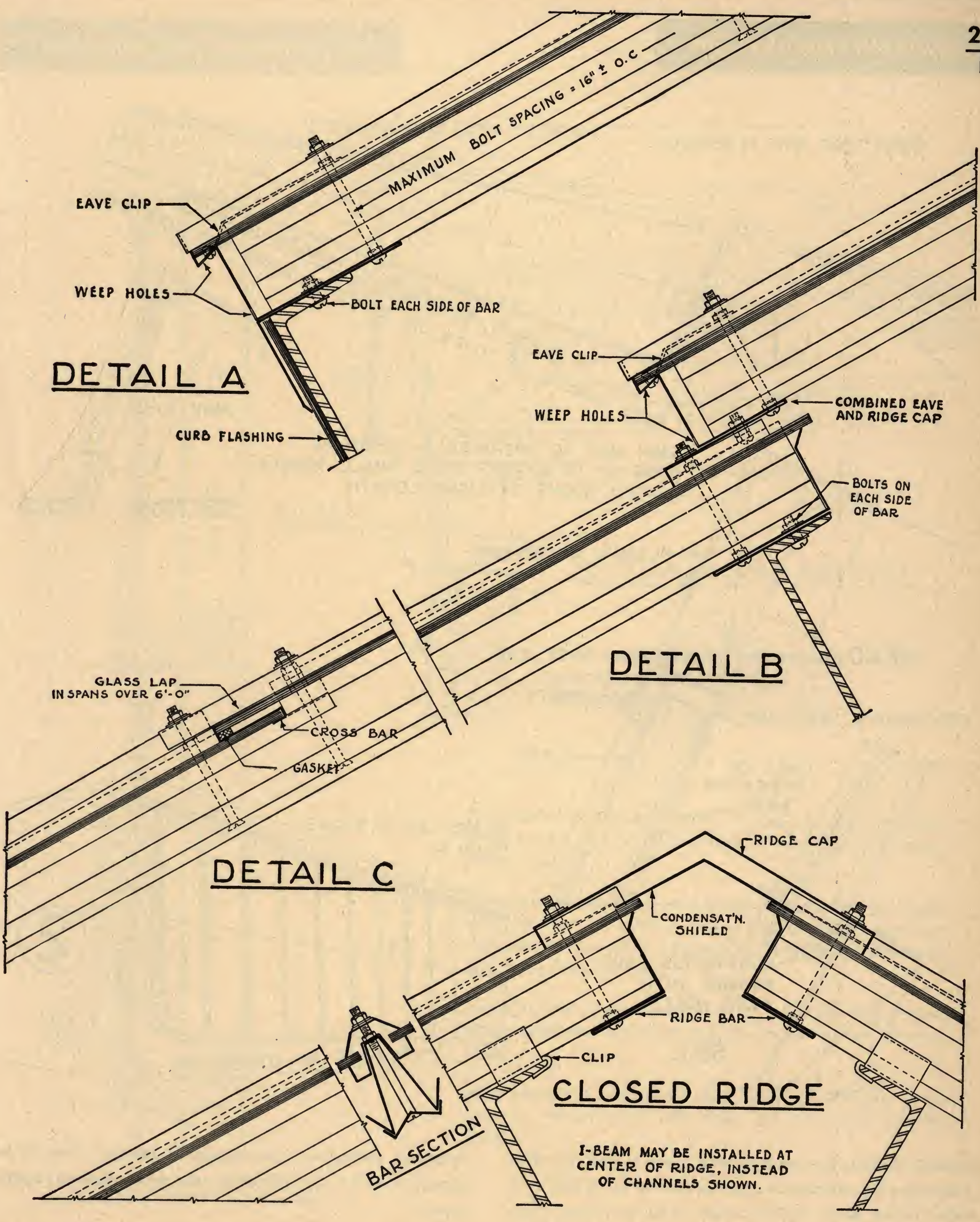

CONTINUOUS RIDGE VENT (OPTIONAL) SEE DETAIL ON PAGE 16
DETAIL C
TOP CORD OF TRUSS
STEEL PURLINS MAY BE CHANNELS OR I-BEAMS. MAXIMUM SPACING 10'-0"
DETAIL B
IF SPACING OF TRUSSES MAKES LONG-SPAN PURLINS NECESSARY, THE USE OF TIE RODS TO AVOID SAG IN PURLINS IS RECOMMENDED.
DETAIL A

Actually, the panel-lap skylight is a series of skylights lapped shingle-fashion, one over the other, thus providing rapid passage of accumulated condensation to the exterior of the skylight.

Ideal for use over exhibition halls, museums, gymnasiums, swimming pools, riding academies, armories, indoor tennis courts, skating rinks or other buildings where effective overhead lighting is essential.

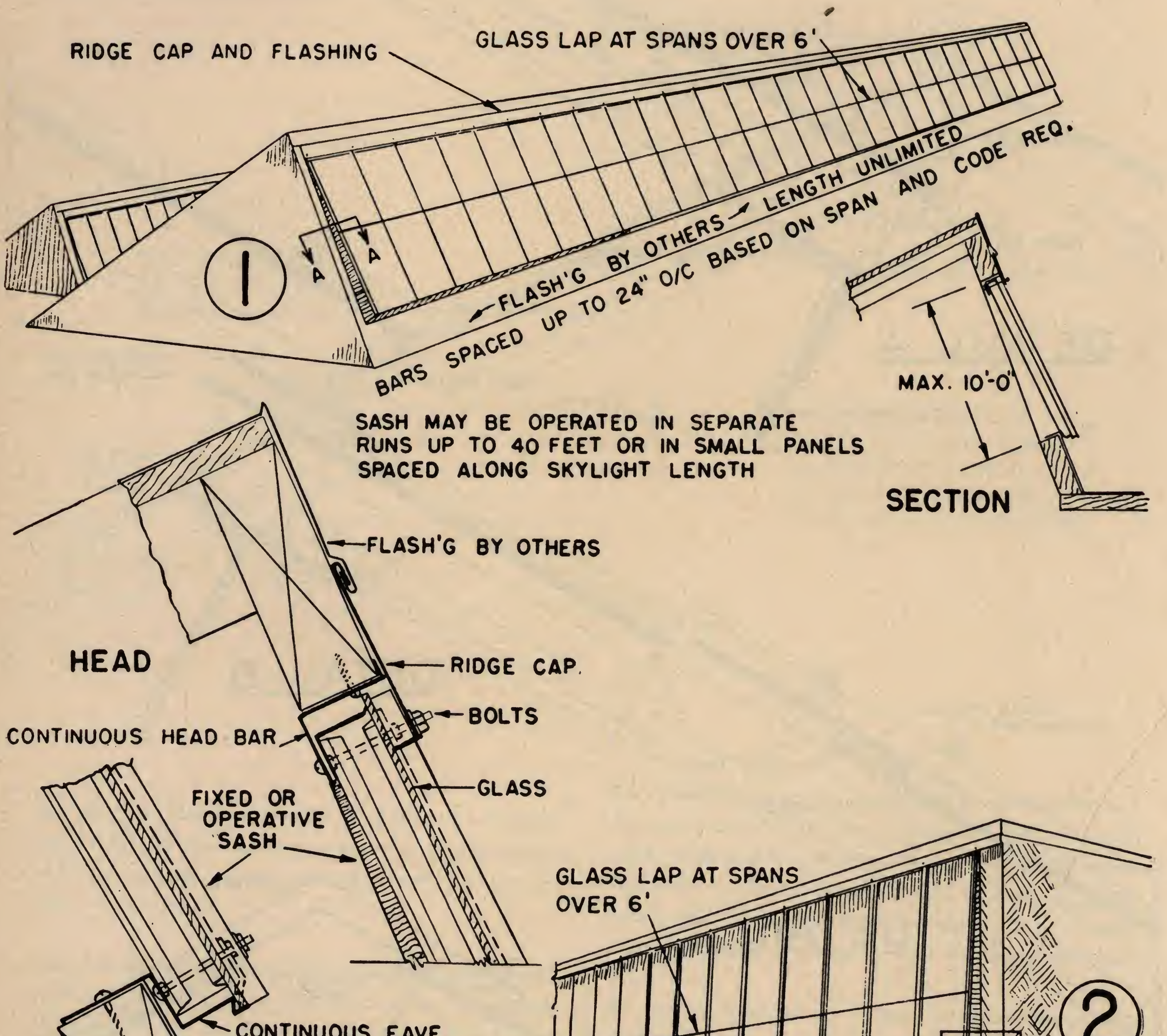
Bar lengths are adapted to spacing of steel purlins and bars spaced up to 24" apart, based on span and local code requirements. This type of skylight can be manufactured in unlimited lengths and is available in galvanized steel, aluminum, copper, monel metal or stainless steel, with either standard or heat-absorbing wire glass.

An optional feature is the "Fisher" Continuous Ridge Ventilator (shown on page 16) or any other type of gravity or power ventilator, with or without damper.



I-BEAM MAY BE INSTALLED AT CENTER OF RIDGE, INSTEAD OF CHANNELS SHOWN.

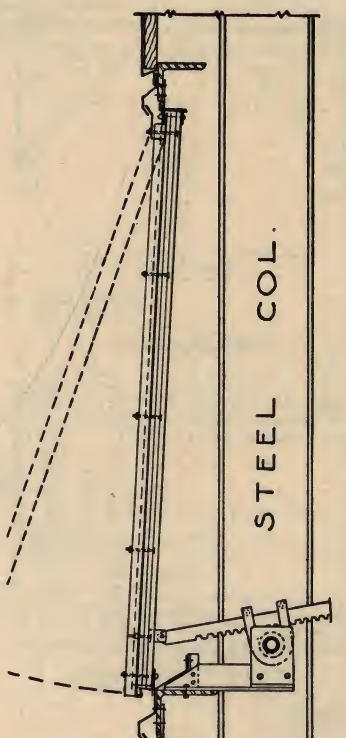
sawtooth type skylight



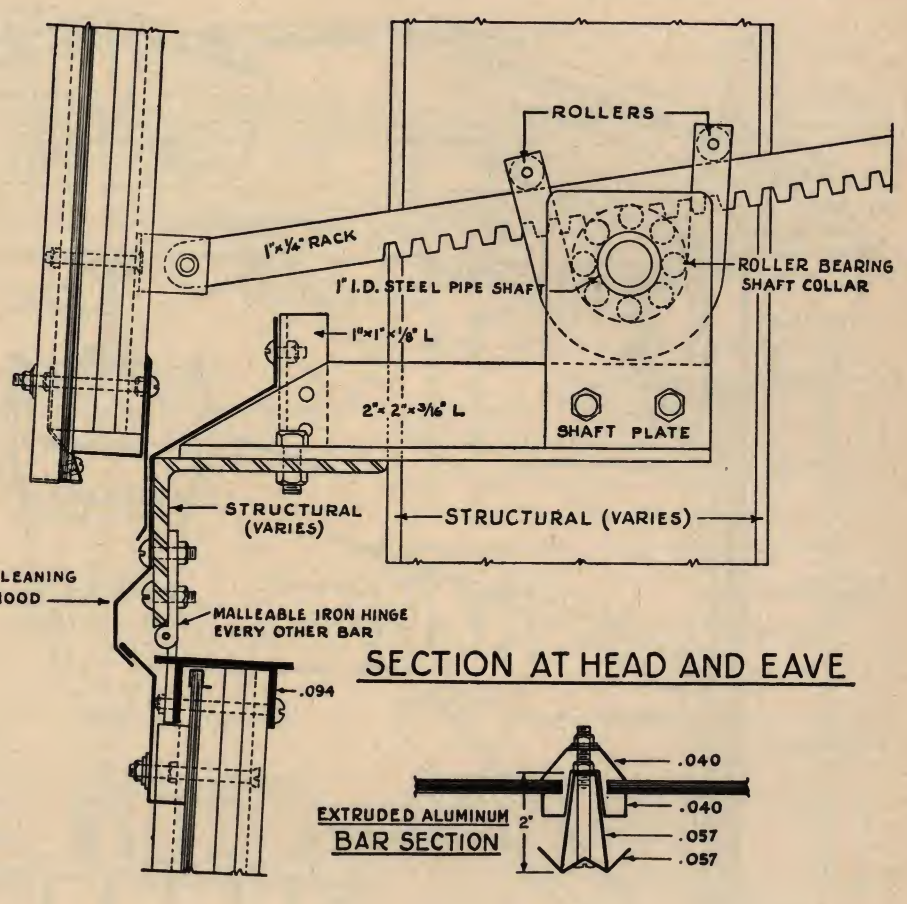
SASH MAY BE OPERATED IN SEPARATE RUNS UP TO 40 FEET OR IN SMALL PANELS SPACED ALONG SKYLIGHT LENGTH

Sawtooth skylights may be stationary or top hinged operative—Sash may be operated in separate runs up to 40 feet or in smaller panels along skylight length—Sash may have chain operated gearing or motor operated gearing—Bars to be spaced up to 24" O/C based on span and code load requirements.

industrial and monitor sash



VERTICAL SECT'N.



SECTION AT HEAD AND EAVE

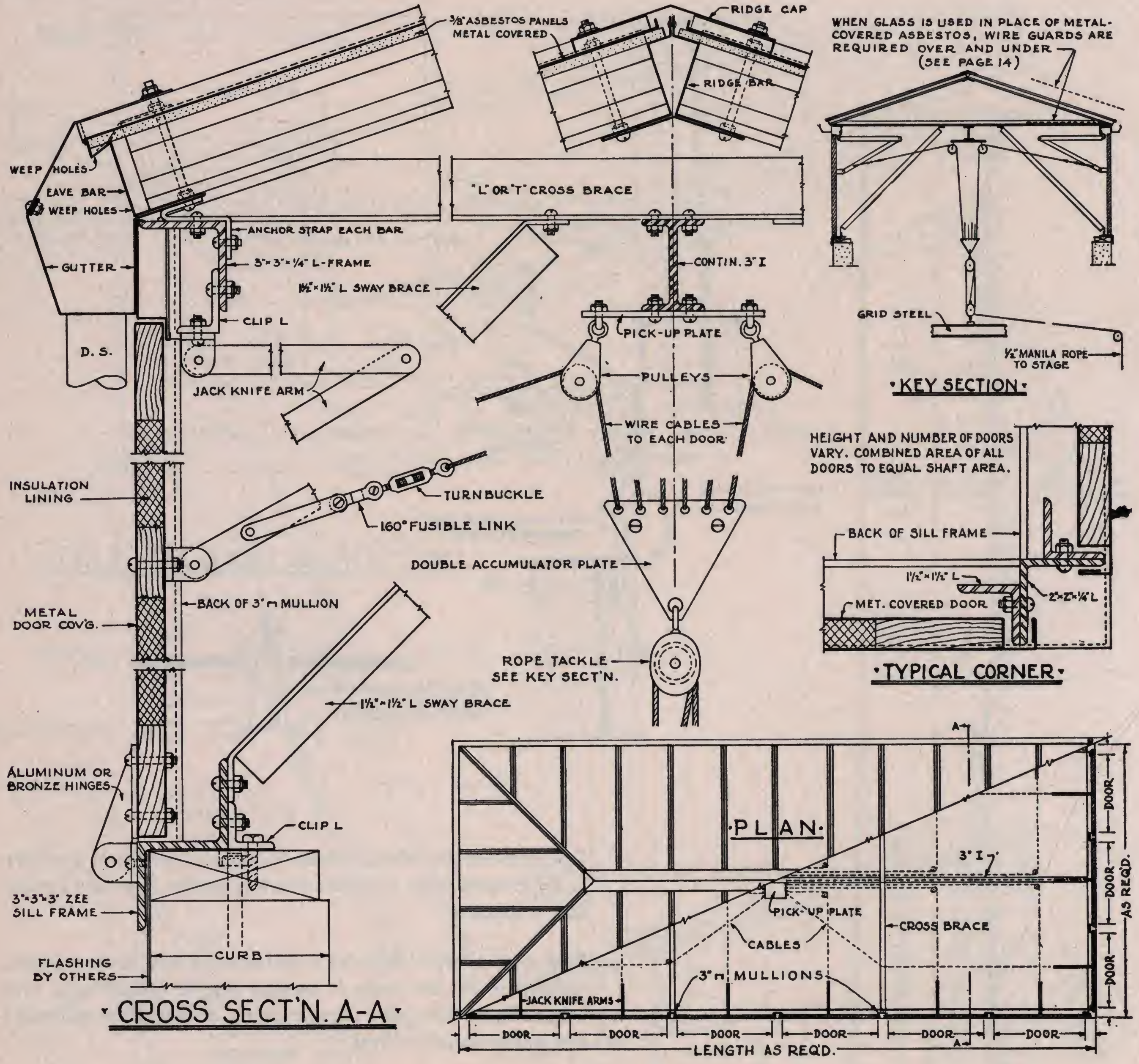
EXTRUDED ALUMINUM
BAR SECTION

The Industrial and Monitor Sash is designed for use in monitors, or for exterior walls of plants where maximum light and ventilation is required.

Sash may operate singly or in batteries of any desired length. Installation can be made in vertical tiers of one or more rows with each tier operating independently, or with partly operating and partly stationary sash.

Entire installation attaches directly to structural steel framing and is adaptable to plant remodelling as well as new construction.

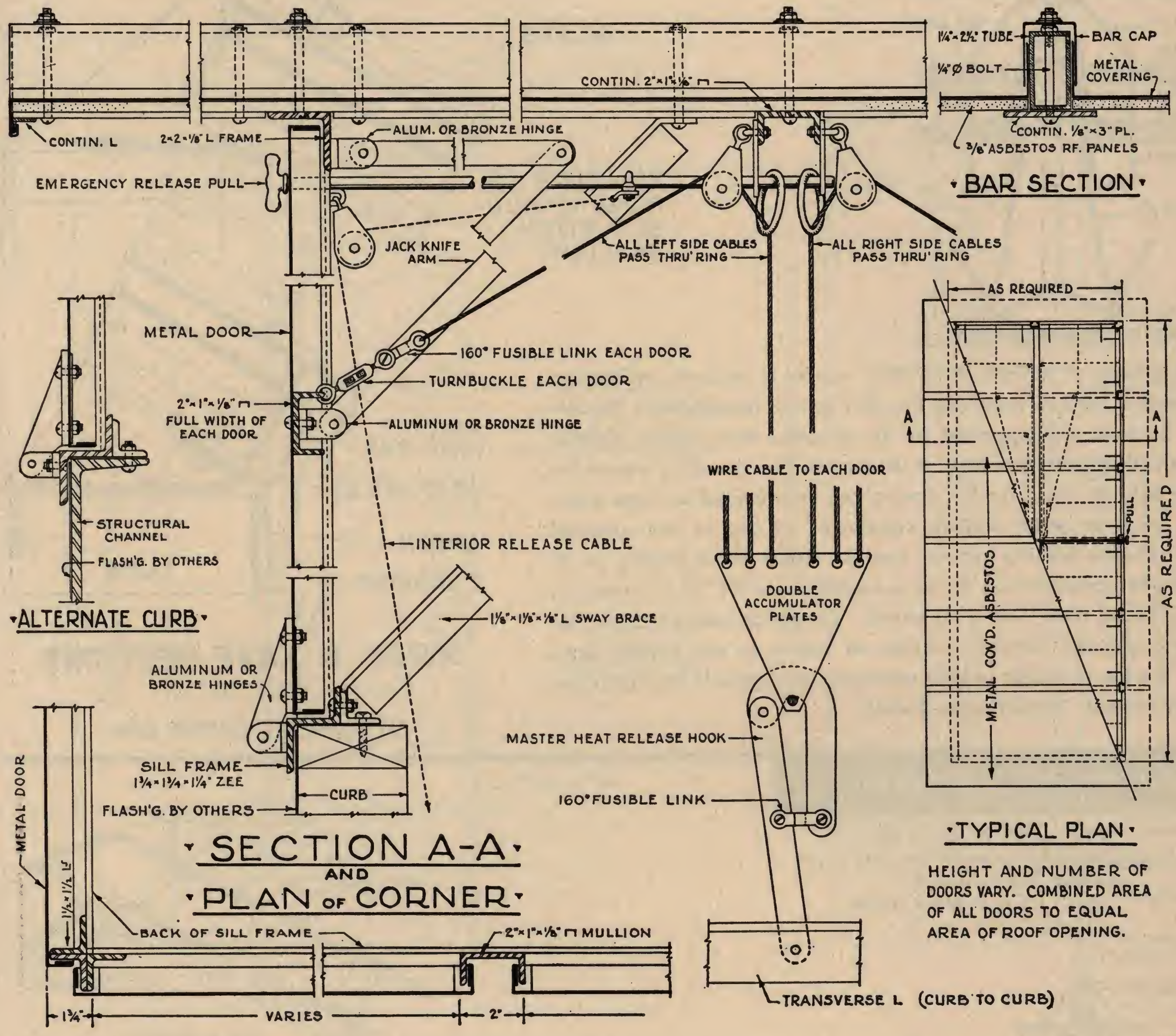
Manufactured in galvanized steel, aluminum, copper, monel metal or stainless steel, with motor driven or hand operated gearing.



FISHER AUTOMATIC STAGE VENTILATORS

Automatic stage ventilators are constructed of painted galvanized steel, aluminum, copper, lead coated copper or monel metal, with structural steel framing. The roof is constructed of 3/8" thick, metal covered asbestos panels, except in localities requiring glass in which cases the glazing consists of 3/16" thick ribbed glass or 1/10" thick plain glass. Doors open automatically in case of fire, but can be hand operated for normal ventilation. The operative mechanism is provided with fusible links, thrust arms, cables, turnbuckles and main cable, terminating at the stage floor. All doors can be released from the stage floor by operating the main tripping device. Wire guards are required over and under the ventilator where glass roof is used. (See page 14 for wire guard specifications.) If metal covered asbestos panels are used, no wire guards are required.

smoke and fire vents

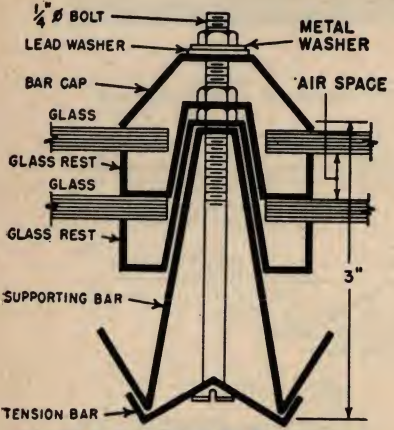


HEIGHT AND NUMBER OF DOORS VARY. COMBINED AREA OF ALL DOORS TO EQUAL AREA OF ROOF OPENING.

FISHER AUTOMATIC SMOKE AND FIRE VENTS

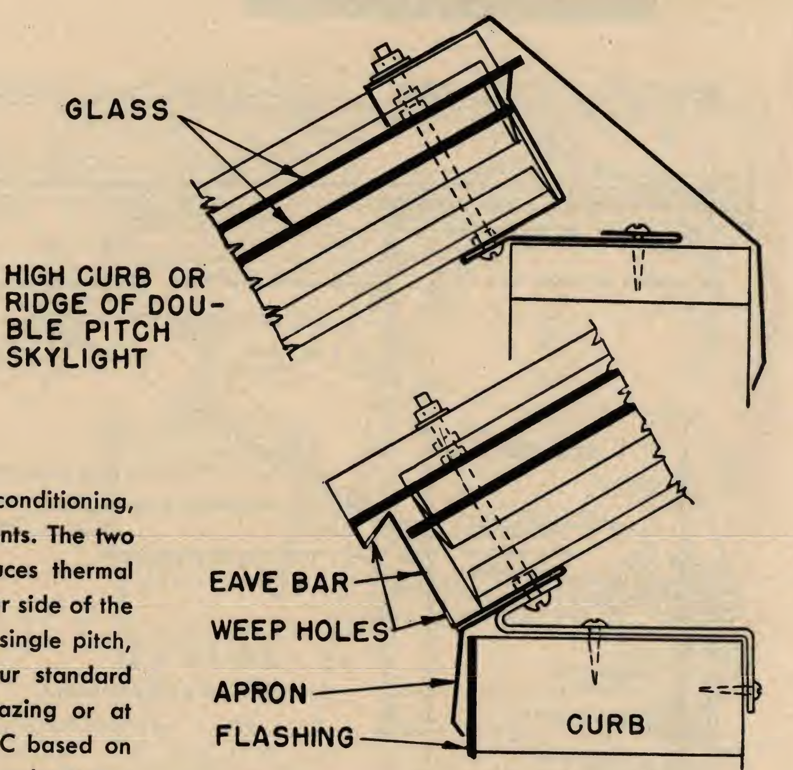
Fully automatic in operation and equipped with a manually operated emergency release feature which permits of opening the doors from outside as well as inside the building. Roofs are constructed of ⅜" asbestos sheet, covered with metal panels. Each door is equipped with turnbuckle and fusible link. All cables converge at a master release hook, also equipped with a fusible link assuring instant release of all doors in case of fire. Automatic smoke and fire vents prevent "mushrooming" and spreading of fire in buildings with large open floor areas. Materials recommended: Painted galvanized steel, or aluminum on steel framework.

double glazed skylights



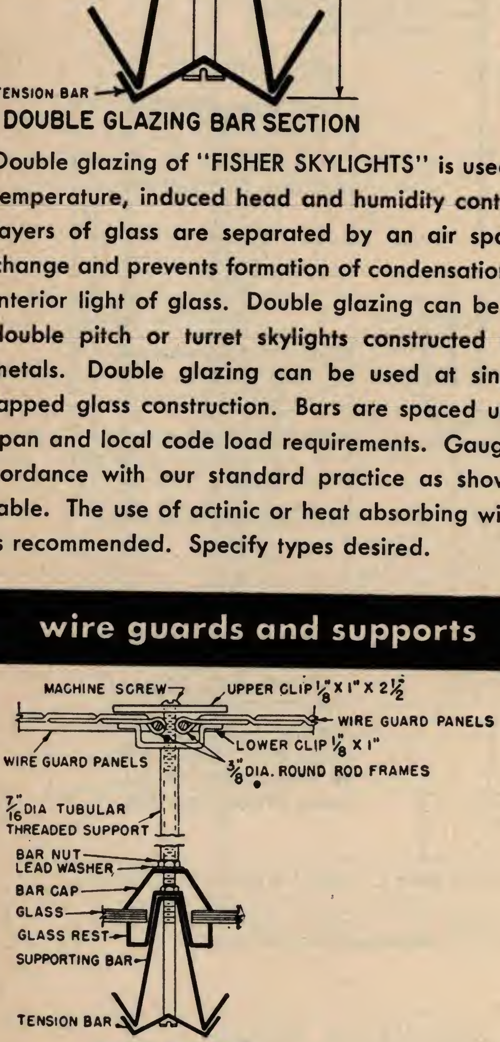
DOUBLE GLAZING BAR SECTION

Double glazing of "FISHER SKYLIGHTS" is used to meet airconditioning, temperature, induced head and humidity control requirements. The two layers of glass are separated by an air space that reduces thermal change and prevents formation of condensation on the under side of the interior light of glass. Double glazing can be provided in single pitch, double pitch or turret skylights constructed of any of our standard metals. Double glazing can be used at single panel glazing or at lapped glass construction. Bars are spaced up to 24" O/C based on span and local code load requirements. Gauges of metals to be in accordance with our standard practice as shown on our working data table. The use of actinic or heat absorbing wire glass in the upper tier is recommended. Specify types desired.

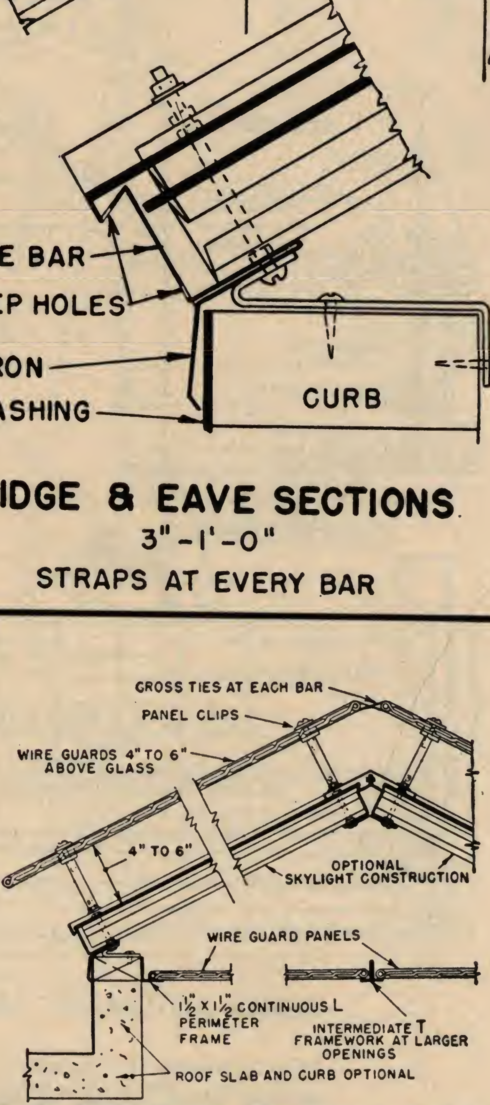


RIDGE & EAVE SECTIONS
3"-1'-0"
STRAPS AT EVERY BAR

wire guards and supports



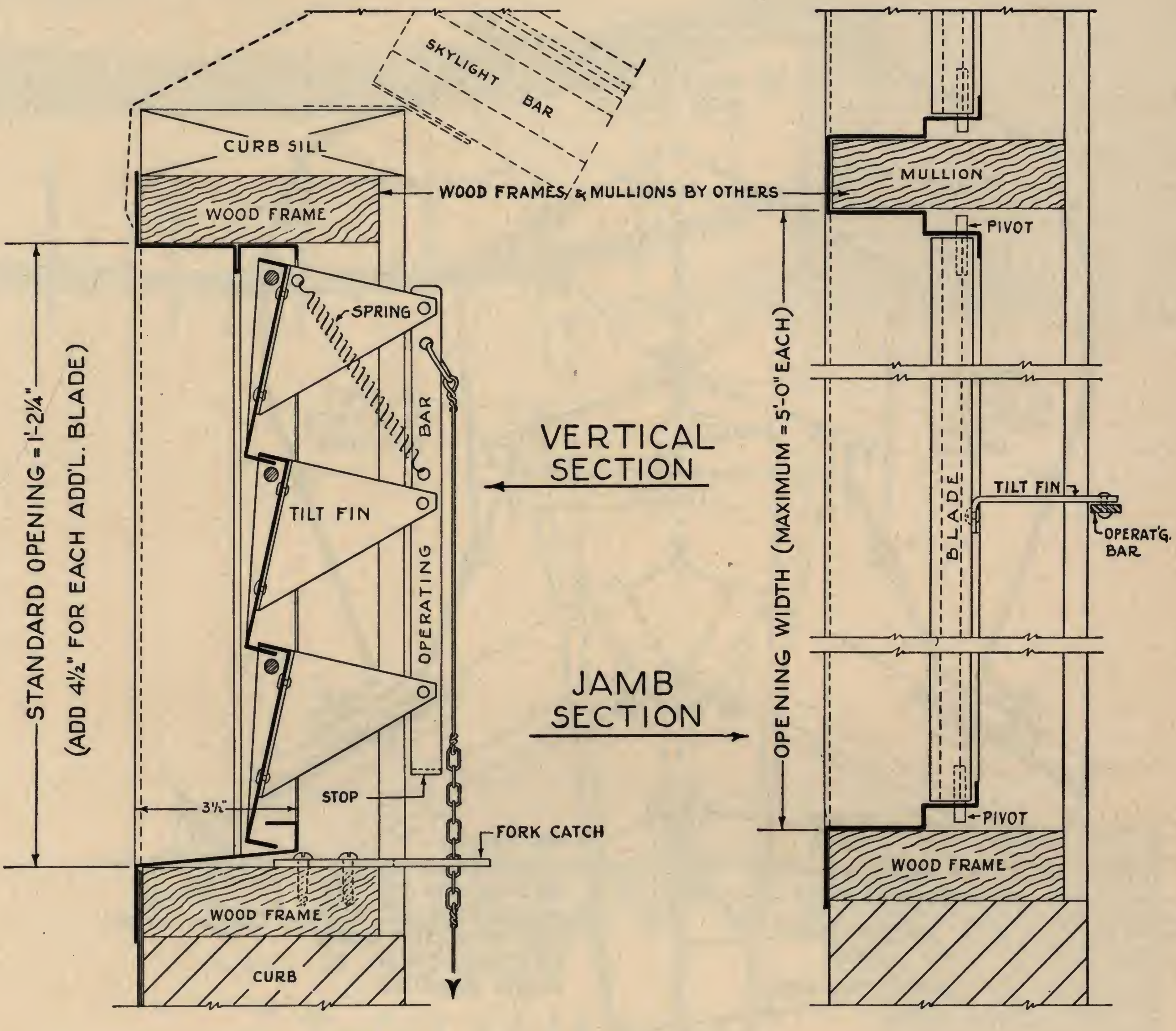
GUARD SUPPORT
SCALE: 3"=1'-0"


CROSS TIES AT EACH BAR
PANEL CLIPS
WIRE GUARDS 4" TO 6" ABOVE GLASS
4" TO 6"
OPTIONAL SKYLIGHT CONSTRUCTION
WIRE GUARD PANELS
1½" X 1½" CONTINUOUS L PERIMETER FRAME
INTERMEDIATE T FRAMEWORK AT LARGER OPENINGS
ROOF SLAB AND CURB OPTIONAL

Guards for FISHER SKYLIGHTS are made of painted black iron, galvanized steel, hot dipped galvanized steel, copper, aluminum, stainless steel or monel metal wire, rod frames and tubular threaded supports, 12 gauge wire in 1 inch diamond mesh pattern is standard.

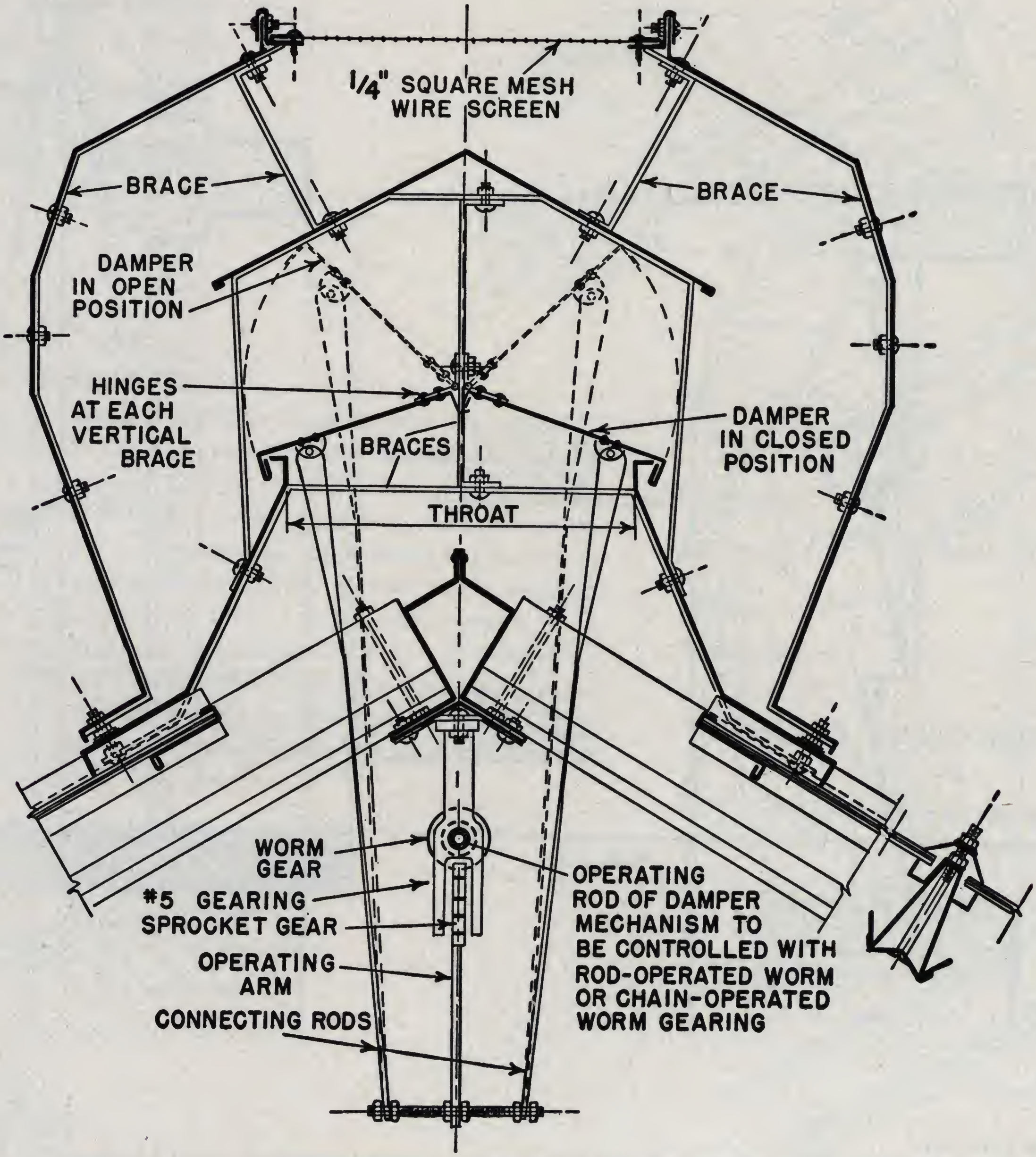
Guards are made two or three light panels wide and are supported above the skylight bars on threaded tubular supports screwed down on the bar bolt nuts. The upper end of the threaded tubular support engages a clip and machine screw that securely clamps the rod frames in place. Guards under skylights are made in small panels for easy removal and handling. They are supported on continuous 1½ inch x 1½ inch by ⅛ inch angle framework. Intermediate tee framework is provided at larger openings.

adjustable louvres



Adjustable louvers are constructed of galvanized steel, extruded aluminum, sheet aluminum, copper, lead coated copper, monel metal, stainless steel or lead clad steel. Louvres may be installed singly or in groups. Standard individual adjustment is shown on detail but grouped mechanical operation can be provided. Mechanical group louvre control can be provided by worm and gear mechanism operated by hand crank rod or chain drive. Group motor power operation with remote electrical control can be provided. While designed primarily for use in the high curbwall of single pitch skylights adjustable louvres are readily adaptable to installation in exterior walls or other walls where controllable ventilation is required. Protection guards, bird screens or insect screens of galvanized, aluminum, copper, monel metal or stainless steel wire can be installed on the exterior of the louvre openings when desired.

continuous skylight ridge ventilator


1/4" SQUARE MESH WIRE SCREEN
BRACE
BRACE
DAMPER IN OPEN POSITION
HINGES AT EACH VERTICAL BRACE
BRACES
DAMPER IN CLOSED POSITION
THROAT
WORM GEAR
#5 GEARING
SPROCKET GEAR
OPERATING ARM
CONNECTING RODS
OPERATING ROD OF DAMPER MECHANISM TO BE CONTROLLED WITH ROD-OPERATED WORM OR CHAIN-OPERATED WORM GEARING

Continuous Skylight Ridge Ventilators provide effective stack air removal. Designed primarily for use on all types of "FISHER SKYLIGHTS," they are readily adaptable for use on any sloped roof or ventilator curb construction.

They are manufactured in throat widths from 4" to 24" and in any length desired, of galvanized steel, aluminum, copper, lead coated copper, monel metal, stainless steel or lead clad steel. The metal used should be the same as the skylight construction.

Center hinged type A dampers, as detailed, do not baffle or block the escaping air when open. Full throat type B lifting dampers can be installed if desired. Dampers are controlled by worm and gear mechanism operated by hand crank rod or chain drive. Large size ventilators can be provided with power operation and remote control. Remote hand control can also be provided.

Protection guards, bird screens or insect screens of galvanized steel, aluminum, copper, monel metal or stainless steel wire can also be installed.

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